



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/014,516	12/14/2001	Tomohiro Nakata	Q67231	3587

7590 09/08/2003

SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC  
2100 Pennsylvania Avenue, N.W.  
Washington, DC 20037-3213

EXAMINER

KIM, SANG K

ART UNIT PAPER NUMBER

3654

DATE MAILED: 09/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/014,516

Applicant(s)

NAKATA ET AL.

Examiner

SANG KIM

Art Unit

3654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 7,8 and 13-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 9-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 4-5, 9 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Kataoka, U.S. Patent No. 4238084.

Referring to claims 1-2, 4-5, 9 and 11, Kataoka teaches an apparatus for winding a web around a core at a high speed, comprising winding tension storing means 11 for storing a winding tension corresponding to the length to which the web is wound around the core; torque converting means 12 for reading said winding tension from said winding tension storing means 11 and converting the read winding tension into a winding torque; and core rotation control means 9 for controlling rotation of the core according to said winding torque; said winding tension being set so as to wind the web to a given length around the core under a low tension or a high tension since the winding tension can be controlled from progressively increasing the tension of the web and decreasing the tension of the web as indicated in the specification using the convex curve in the specification column 1, lines 40-50, and column 5, lines 25-30, and as shown in Figs. 1-5.

Claims 1-2, and 4-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Yano et al, U.S. Patent No. 4480799.

Referring to claims 1-2 and 4-5, Yano et al teach winding a web around a core at a low tension, then progressively increasing the tension of the web at a predetermined rate until reaching a high tension, and thereafter winding the web under a tension which is being reduced from the high tension as clearly shown in Fig. 8.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kataoka, U.S. Patent No. 4238084, or Yano et al, U.S. Patent No. 4480799.

Referring to claims 3 and 6, Kataoka or Yano et al disclose a specific value of tension. It would be obvious to make the apparatus capable of setting a low tension to a value up to 15% of the length, as a choice of design consistent with typical winding web for this type of device since the tension can be controlled as indicated in the above paragraphs.

Referring to claims 10 and 12, Kataoka or Yano et al does not show a plurality of webs. Kataoka shows only the side view and cannot determine if there are a plurality of webs used or not. It would be obvious to make the apparatus capable of having more

Art Unit: 3654

than one web to speed up the process of article winding, as a choice of design consistent with typical winding web for this type of device.

### ***Response to Arguments***

Applicant's arguments filed on 7/11/03 have been fully considered but they are not persuasive with respect to claims 1-6 and 9-12.

Claims 7-8 and 13-17 are withdrawn.

Applicants argue that Kataoka does not disclose winding the web to a given length around the core under a low tension, progressively increasing the tension until reaching a high tension, and thereafter winding the web under a tension which is being reduced from the high tension, and Kataoka does not even discuss the tension as anything but "decreasing". Furthermore, Fig. 1 of Kataoka concave and convex curves of the tension never shown to rise above the initial value.

Examiner disagrees with the applicants because Kataoka discloses the applicants claimed invention as explained in the rejections above. Kataoka clearly discloses the tension "decreasing", as explained in the specification column 1, lines 40-50, and column 5, lines 25-30, and as shown in Figs. 1-5. Furthermore, applicants' claims never recite that the tension starts with the initial value lower than at the high tension. Even if the applicants were to state it so that the initial value has to be lower than the high tension, Kataoka would still meet the claims because the initial tension can be controlled based upon on a theoretical equation, where the factor of the tension can be freely selected.

Applicants argue that Yano et al is somewhat nonanalogous to the present application. Because the winding machine of Yano et al differs by a web which covers substantially the entire surface of the core on each core rotation and the way the wire has to "travel".

In response to applicant's argument that Yano et al is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Yano et al is an analogous art which pertains to winding a web. Furthermore, applicants' claims never recite that a web covers substantially the entire surface of the core on each core rotation and the way the web has to "travel".

Applicants argue that Yano et al does not disclose winding the web to a given length around the core under a low tension, progressively increasing the tension until reaching a high tension, and thereafter winding the web under a tension which is being reduced from the high tension, as claimed in the present application. Fig. 8, also shows winding a web under a tension which is equal to or increasing to the high tension which, as explained in the text, maintains the tension substantially constant for fabrication a coil of rectangular cross-section.

Examiner disagrees with the applicants because the applicants fail to see the whole invention. As stated in the rejections above, Yano et al teach applicants' claimed invention. Furthermore, even the applicants admit that the tension of Yano et al can

increase as the wire is wound about the bobbin and may increase at least to the level of the previous high tension, as indicated in Fig. 8, and a tension control apparatus which is capable of controlling the tension to be constant. This does not mean that Yano et al apparatus cannot have a low tension to a high tension and back to a low tension, since applicants have recognized that Yano et al apparatus is capable of controlling the tension and is not limited to a constant tension.

Applicants argue that the lack of combination of Kataoka or Yano et al with a specific reference and the use instead of a supposed design choice also seems to be the product of hindsight with knowledge of the present invention.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 3654

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sang Kim whose telephone number is (703) 305-3712. The examiner can normally be reached Monday through Friday from 8:00 A.M. to 5:30 P.M. alternating Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on (703) 308-2688. The fax phone numbers are (703) 872-9326 for regular communications and (703) 872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

SK

9/3/03



KATHY MATECKI  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600